

Transactions *of* The Chartered Surveyors' Institution

SESSION 1938-1939.

AT THE ORDINARY GENERAL MEETING

*Held at the Chartered Surveyors' Institution, Monday,
6th February, 1939.*

Sir CHARLES BRESSEY, C.B., (President) in the Chair.

NEW MEMBERS.

The following new members were received by the
PRESIDENT prior to the meeting and signed the Register:—

Professional Associates :

BEAN, PHILIP RIMMINGTON	JONES, WILLIAM EDWARD
BEECH, GEOFFREY CLARENCE	LAWRENCE, STANLEY PERCY
CATHROW, WILLIAM RENE	MURDOCK, WILLIAM LEE
CHIPCHASE, ERNEST CHARLES	NICHOLAS, PHILIP ALBERT
COLLINGS, EDGAR JOHN	KISCH, MISS ALMA ROYALTON
COOK, GRAHAM	ZAIDEL, ZVI

PAPER NO. 588.

A DISCUSSION took place on the subject of

**PROBLEMS OF VALUATION AS AFFECTED
BY MODERN LEGISLATION.**

The PRESIDENT, in introducing Colonel Hammond, who was to open the discussion, said that Colonel Hammond could deal with the subject from a variety of aspects, as he had had experience outside the ordinary range of surveying. He had been closely connected with building societies and had had a good deal to do with school architecture; he had thus practised in wider fields, perhaps, than those which lay open to most of the members present that evening.

COLONEL F. S. HAMMOND, D.S.O., O.B.E. (Chartered Surveyor), in opening the discussion, said: There are two apologies that I have to make. The first is for not having written a paper so that you could have had it before the meeting. I did not feel that I could write and then read a paper, and I had to beg leave not to do so. My second apology is for speaking to you at all, because there are so many gentlemen here who know very much more about the subject than I do and could deal with it very much better. However, if I may have the indulgence of those gentlemen who have looked through the notes of my address which have been printed and say they knew everything there already, I should like to speak more to the younger members, who have not had so much experience as some of the older ones, and to point out to them some of the difficulties which confront surveyors and valuers owing to the recent spate of legislation which concerns the profession.

I am not going to criticise the Acts or the administration of the Acts as this is not the proper place for doing so, and although I am going to give you illustrations of nearly everything that I speak about, I am going to avoid, as far as I possibly can, saying anything which would lead you to identify any particular property or district. There is one which I am afraid it will be impossible for me to speak about without its being recognised.

I have looked at the subject to some extent from an architect's point of view, because I am definitely an architect and a surveyor. I am not going to go into detail with regard to the different Acts, but I propose to take a few special points from some of the Acts.

I will first deal with the Rent Restriction Acts. They are so complicated that it would take an entire evening to attempt to go through them, and the bulk of them perhaps have very little to do

with valuation. I will therefore simply point out a few of the difficulties that one experiences in valuing property under these Acts. The first great difficulty that we always find is to know whether a property is controlled or decontrolled. There have been certain complications ever since the first Rent Restriction Act, but up to a certain date the matter was fairly straightforward, particularly in the case of buildings which were in one occupation. If the rateable value was below a certain figure the property was controlled, and if the rateable value was above that figure it was decontrolled. I think that the complications and difficulties were first recognised when that Act came into force which re-controlled properties which were already decontrolled, because many people never heard of that Act at all, and there are people at the present time who own properties of which the rent or rateable value is down to control point and, not knowing that the Act had ever been passed, they did not take any steps whatever to register the properties as decontrolled, though the properties had already once been in the state of decontrol.

The second difficulty is that registration is no proof of decontrol. Many people, when the Re-control Act came into force, because they were not quite certain whether their properties were decontrolled or not, went to the local authority and registered them as decontrolled. That did not mean that they were necessarily decontrolled; it was simply a safeguard. One can go to a borough council and say "Is such and such a property registered or not?" and the answer is "Yes, it is registered as decontrolled": but does that mean that it is decontrolled? We do not know, and it is quite impossible in many cases to say definitely whether a property is controlled or decontrolled. The matter is becoming more and more difficult, because, as time goes on and landlords sell their properties or tenants change, the history disappears completely. The President has told you that I have a fair amount to do with building society work, and that is true. We frequently as surveyors refer the matter to our solicitor and say that if a property is decontrolled we will value it at such and such a figure, and we get him to try to find out whether it is controlled or decontrolled, and over and over again the solicitor reports to us that it is impossible to say. It is extraordinarily difficult to value property which comes below the rateable value for control when one does not know whether it is controlled or decontrolled.

There is one other little point under the Rent Restriction Acts which I should like to bring forward and which I hope will be discussed later on. Up to the present I have stated facts which we all know, but this is another point that we are constantly meeting. Is there a difference in value between a controlled house

which is occupied by a controlled tenant and has been purchased for investment and a controlled house which has been purchased for occupation by somebody who hopes to live in it himself later on? I feel that there is a very considerable difference. If a man buys a house for investment, even if his tenant leaves he can only let it again at the same rent, the controlled rent. If a man buys a house to live in himself he can afford to pay very much more, but he is handicapped later on if he wants to sell the house, because he can only sell it for the price he gave for it if he can find somebody who will buy it for owner-occupation. If he sells the house as an investment, no matter how long it may be after he had purchased for owner-occupation, then immediately, in my view at any rate, the value goes down, because the new purchaser can only hope to let the house at the original controlled rent. That is an interesting point which we on the Board of my Building Society have discussed many times, and I put it forward for discussion.

With regard to town planning legislation, I am going to deal with only a few points. The first is the difference in the interpretation of town planning in different districts. I will give you two instances. Clients of mine in a rural district brought some property adjoining what I may describe as a very light type of factory or business, and they brought 5 acres of vacant land adjoining, with a view to extending their business premises ultimately. The local council zoned the 5 acres for residential purposes only. I appealed on my clients' behalf, and after a very considerable amount of negotiation the local council zoned $3\frac{1}{2}$ acres of the 5 acres for residential purposes and $1\frac{1}{2}$ acres, immediately adjoining my clients' premises, were zoned for light industry; they said there was no heavy industry in that particular district. In another county clients of mine have some country property with a building of a semi-permanent character occupied by what one might describe as a light industry. The local council zoned the area for shops. There was a good piece of spare land round this factory and it was a most unsuitable site for shops: so I appealed—I do not mean legally, but for consideration and indulgence on the ground that this piece of land and the remainder of the vacant land round my clients' premises should be zoned for light industry. The council said it could not be done under the Act of Parliament. I said it had been done in another district for clients of my own. They said "We are not going to do it here. It must be zoned either "for industry, which includes heavy industry, and we are not going "to have that, or for shops or residential purposes." I could not get them to alter that decision, but I got over the difficulty ultimately, because the local council said that the particular property in question might continue to be used and extended for the particular business for which it was being used then, and

they also said that, if we wanted to extend later on into some other business, subject to the Ministry of Health hearing an appeal, we might do so to some extent. That was the best I could do in that case. Therefore we have the position that in one district $1\frac{1}{2}$ acres were zoned for light industry and in another district the council said the Act would not allow of land being zoned for light industry, and it seems to me that it should not be possible for the Act to be interpreted so differently in different districts.

There is another point with regard to town planning which I should like to mention. A gentleman (not a client of my own) bought some old houses not very far from London with a view to pulling them down and building a block of flats. Preliminary plans were prepared and sent to the local council, and they were tentatively approved. He then bought the land. Before he had had time to complete his working drawings the local council town planned the entire district, and when he sent in his working drawings they were rejected, although they were on exactly the same lines as those previously submitted and tentatively approved. He appealed; he engaged counsel to appear before the local council on his behalf, and he did his best to get the council to alter their decision, but he failed to do so, with the result that eventually he had to build a block of flats three storeys high on a piece of land for which he had paid a price with the idea of building a block of flats five storeys high. That meant that he lost a very considerable amount of money, or, at any rate, a considerable amount of value. It seemed a strange thing to me that any council should deliberately turn down something to which they had given their consent only a few months before, because they had town planned in the meantime. You realise how difficult it is for anyone to value property when called into a district where town planning has not become the rule, when such a thing as that can happen.

There is another little point, which I do not propose to stress at all. In town planning, of course the owner of land or property is absolutely tied down by the zoning put upon it—so many houses to the acre if it is for residential purposes, and so on—but, on the other hand, the council can, if they wish, entirely alter the zoning later on, and that is a very great difficulty.

With regard to ribbon development, I have not come into contact with that subject very much, because my work lies mainly in London and other big cities, but I came across a case some time ago which presented unusual difficulties. A year or two ago, just outside London, I was asked to design an addition to a building which was situated about 100 feet up a side road leading out of a fairly main road, but not the sort of

road that one would expect to come under ribbon development because it had not a very heavy burden of traffic. I designed the addition, and I sent in the plans and application under town planning. To my surprise I was told that I must apply not only under town planning but under ribbon development, which this road had been zoned under, as no building could be altered that was within 220 feet of the centre of this road. That meant that in a strip of land 440 feet, taking it in both directions from the centre of the road, no one could build without sending in his plans both under town planning and under ribbon development. I know a good many people in that district and I have not discovered a single person who owns property within that zone who had the faintest notion that the road had come under ribbon development. It is extraordinarily difficult to value property when such things are done without general notification.

I should like to say a few words about sanitary legislation. It seems rather strange that such things as the following can happen. Probably all of you know—at any rate, all those of you who deal with architecture at all—that quite recently some sanitary by-laws were brought into force which only a few months ago became practically compulsory on all local authorities. In effect they say that every water-closet must be built against an outside wall, and that outside wall must have windows in it overlooking a space dedicated to the public or definitely and absolutely belonging to the property. Of course in some parts of the City of London and Westminster and other places there are many lighting wells which are joint lighting wells for various properties, and it is very difficult indeed to comply with that requirement. But to show you what extraordinary things happen sometimes, when Acts of Parliament are passed without sufficient consultation with professional societies such as this Institution, which has technical experts available to the Government at all times, I may tell you that I know for an actual fact that, just after these sanitary by-laws were put before the country and became law, an application was put in to one authority, which has part of the River Thames in its area, in respect to a building which backed on to the River Thames, there being no space whatever between the waterway and the building. It was desired to put some lavatories next to the river, and the authorities discovered that, because the River Thames is not dedicated to the public but belongs to the Thames Conservancy, there was not sufficient light and ventilation overlooking the River Thames to make it permissible for the lavatories to be put there. I think the local authority, although it broke the law by doing so, did allow the lavatories to be built. That

case shows that there are difficulties in connection with these sanitary by-laws.

I think that slum clearance has caused extraordinary difficulties in connection with valuation. First of all, there is the impossibility of obtaining definite information as to whether a scheme is likely to come into operation in the near future. A brother surveyor, who is present this evening, and I were called upon some few years ago to survey and value some property in London which we did not dislike but which was rather on the border line, and it had some rather unhappy property just behind it. We were surveying for mortgage, and we got the solicitors who were dealing with the case to write to the local authority and ask them point-blank whether or not there was any likelihood of the property immediately behind ours being wanted for slum clearance in the near future. The authority replied in writing that there was no scheme whatever under consideration;—I think those were the exact words of the letter. We were advising the people who were going to lend the money on mortgage to the man who proposed to buy the property. On the strength of this assurance by the local authority he bought the property, and our clients lent part of the money by way of mortgage. Within less than twelve months of the actual writing of the letter to which I have referred, the authority scheduled the entire district, including this particular property. I do not quite see how we can guard against that unless we say that no property that can possibly be scheduled can be valued.

In the next case with which I am going to deal I am afraid you may recognise the property, but I am not making any criticism; I am only telling you the facts. It seems to me strange and to make things extraordinary difficult for valuers, that not only can a local authority take property which is in bad repair or very congested in order to clear slums, but it can also take land and buildings of the very best class, removed quite a long way from the slums which they wish to clear, and compulsorily acquire them. The case I am thinking of, which will be recognised by a good many of you, is a case of over 50 acres of land zoned as the very best in the neighbourhood; I think it was zoned as 8 houses to the acre. The people who lived there thought they were in an ideal spot; they had very nice gardens, very nice houses, and a very nice outlook for those houses. On that estate, after town planning had been actually adopted, about 30 houses were built, costing about £3,000 each, the plans being passed under the Town Planning Acts. Yet at one fell swoop the local authority served compulsory acquisition notices on the entire property and took it compulsorily, and they are turning the people

one by one, as they can, out of these houses. I do not know how it is possible for a valuer to guard against a thing of that sort. I have spoken to those who were concerned on the local authority and I have had some negotiations with them myself, and even they have said quite frankly that it was inconceivable that such a thing could happen.

I will tell you of one case that I have myself on that particular property, in order to show you the hardship and the difficulty of dealing with valuations in such cases. A client of mine who wanted a very nice home with a good outlook for his comparatively young family saw a house about six years ago on this estate, which he thought would be suitable. It was not an up-to-date house, as it had not even got electric light. On my advice he purchased it, with a short lease and paid a premium for a 999 years' lease. He did the place up throughout at very great expense and installed central heating and electric light, and he built a garage from my designs, which were passed by the town planning authority. Within about two years he was served with a compulsory acquisition notice, and the valuation is not based on what the house had cost him but on what one can agree as being the value in the open market. He has to turn out of his home and he is bound to lose a great deal of money, as, apart from all the money he had spent on the house, he has the expense of moving to a new house, involving the buying of new carpets, linoleum, and so forth. I do not know how I could have guarded him against this, because it was inconceivable that such a thing could happen. One feels that the legislators who passed some of these Acts did not know the power they were giving to local authorities. The point I am making is that in cases of this description one cannot very well guard one's client, and the question of valuation becomes very difficult indeed.

Another point is that there is no compensation for the people living in a good district who suddenly have planted in the very middle of it blocks of artisans' dwellings in which people from the slum clearance areas are housed. It is a well-known fact that as soon as it is known that such a thing is going to happen the value of the property goes down, though, in my experience, if people hold on to their property for a little while they find that things stabilise themselves again.

There is one little point that I want to put forward specially for discussion, because it is a case which I came across very unexpectedly and which was something entirely new to me. Something similar happened in one of the boroughs just on the border of London. Some property was scheduled, in an extremely nice road with some extremely nice though somewhat old-

fashioned houses, for building large blocks of flats to house people from the overcrowded districts. I was acting for the freeholder of three of these old houses, who was getting the ground rents for perhaps thirty years to come, and I valued the ground rents on a fixed term of thirty years, and then I valued the reversion on the basis of the sort of rents that one would get in that neighbourhood at that particular time, deferred thirty years. I suppose that anyone who does valuations would say that that was the right way to do it. I went to see the valuer to the local authority (it was not the London County Council, but a borough council; I do not know whether you will recognise where this district was), and he immediately agreed the first item, *i.e.*, the ground rent by so many years' purchase, but when I came to the reversion he said "I presume you are basing your reversion on the sort of rents that you are getting in this particular road at this particular time," and I said "Certainly." He then said "Are you aware of the fact that before we served compulsory acquisition notices in this road at all the council had acquired the adjoining property? Therefore, even if we had not acquired this property, there would have been slum clearance blocks of flats next door to your people's premises, so that, by the time we served the notice on your client, your reversion was already that of some rather nice houses next door to some slum clearance flats." I will not say exactly what I thought about that. If it had come from a certain type of speculator I might have said something fairly strong. I should have liked to fight it out, but unfortunately—or perhaps fortunately—I was able to agree a price which my client was quite pleased to accept. It does seem to me a rather terrible thing and an entirely new venture in valuation work if a local authority can surreptitiously buy private property next door to some property which they intend to acquire compulsorily and can then write down the value of the latter property because they intend to build blocks of slum clearance flats on the property which they have secretly bought.

I suppose you expect me to give you some idea of the remedy for these various things that I have mentioned. Quite frankly, I do not know of one. I do not know what to suggest except that you should make yourselves as fully acquainted as possible with all the relevant legislation and that, in valuing for clients, you should warn them that there is certain legislation and that the valuation can only be taken on what exists at the present time. One cannot foresee the future and one cannot prophesy.

If I might put my finger on what I think is the real difficulty, it is that nearly all the recent Acts of Parliament—town planning, ribbon development, slum clearance, and so on—have given local

authorities discretionary powers. Taking the architectural side, under the London Building Act we knew exactly what we could build, because the Act laid down the law for every single thing, but now we do not know what we can do. We send in an application under the Town Planning Act, for instance, and it is within the discretionary power of the local authority to grant it or to refuse it. We cannot tell in the least how that discretionary power is going to be exercised; we cannot influence it, and it is not always exercised in the same way in adjoining districts. As I have said, I feel that the great difficulty in all modern legislation is the giving of discretionary powers to people, making it absolutely impossible for the valuer and the surveyor to know exactly what is going to happen even in the immediate future, still less in the more distant future.

Mr. J. G. ELSWORTHY (Chartered Surveyor) said it was with very great pleasure that he proposed a vote of thanks to Colonel Hammond, first for initiating the discussion and, secondly, for the very interesting discourse that he had given in opening the discussion. Colonel Hammond had covered the ground so fully that those who followed him could only amplify what he had said and give instances which had come under their own notice of the effects of the various Acts.

With regard to the Town Planning Act, Colonel Hammond had mentioned the effect of the reduction of the number of floors in a proposed block of flats. He himself could give an instance in London of a block of flats which, with the sanction and approval of the local authority, was designed to have seven floors. After the building had been commenced, the local authority changed its mind and said the building must not have more than five floors. The financial result of that decision was that the ground rent, £2,250, had to be reduced to £1,750. Multiplying the difference by twenty years' purchase, he thought it would be found that the unfortunate landowner was out of pocket by £10,000.

Another example under the Town Planning Act had recently come to his notice. In order to preserve the amenities of a certain district, the planning authority decided that only one house to 25 acres should be built. The result was that houses with about 45 acres had become unmarketable. In many cases they were somewhat large for modern requirements, though they could be adapted possibly at considerable expense; but what would be excellent sites for houses with about 10 or 15 acres—which, he still thought, would amply preserve the amenities of the particular district—had become impossible, and one house which should have been sold for £11,000 was sold for £4,750.

In the case of a combination of the Town Planning Act and the Ribbon Development Act there might be a site for two good houses in a country district, but it was found on enquiry that at some time or other a service road was going to be made which would result in the site for two good houses becoming too small a site for even one.

Turning to an Act which had not been mentioned by Colonel Hammond, the Landlord and Tenant Act, when under certain conditions a tenant could claim a renewal of his lease. Recently a property-owner in a town not very far from London wanted to acquire a certain property. The owner of the property was quite willing to sell it. The prospective purchaser made it clear that he wanted the property ultimately for his own occupation. The tenant astutely would give no indication as to whether he wished to renew his lease or whether he was going to claim the benefit of the Act, which would compel the owner of the property to offer him a renewal of his lease. The result was that again the property-owner was debarred from dealing with his property amongst such a wide range of purchasers as he otherwise would have had.

The effect of the legislation which enabled trolley-buses to be substituted for trams in London had also to be considered. Considerable difficulty had been experienced all over the metropolis in finding turning points for the trolley-buses, and some formerly quiet roads had been spoiled by having trolley-buses passing along them. He had in mind one very pleasant square which had been absolutely ruined by the effect of the legislation in question.

There was one point with regard to overcrowding which had not been mentioned by Colonel Hammond. For the benefit of the younger members he would point out the importance of checking the number of inmates of tenement houses which had large rent rolls, as it would frequently be found on examination that a considerable portion of that large rent roll was not legally chargeable.

So far he had only mentioned Acts which were detrimental to the property-owner, but in order to end on a more cheerful note he would refer to some which he thought had helped the property-owner. One was the Act which had brought into being the Agricultural Mortgage Corporation, which enabled a long term loan to be obtained on those farms which had been so difficult to finance before. He would also refer to the 1925 Act which gave relief from vexatious claims for dilapidations, a very much needed reform. Finally, he would mention the De-rating Act, which was so old now that it could hardly be called modern legislation, but had greatly helped the owner of industrial and agricultural property.

He had heard it said that the Rating and Site Values Bill could not be discussed by the Institution because it was a political measure. He was sure that the members of the Institution did not

wish to judge anything from a political standpoint, but he thought they should take their courage in their hands and advise their clients as to the economic effect of the various Acts which were passed, quite irrespective of whether they pleased the rating and political powers or otherwise.

Mr. H. E. GILLET (Chartered Surveyor) said it was his privilege to second the vote of thanks to Colonel Hammond for his extraordinarily fine address. There were one or two small points to which he would like to refer, though he was afraid that they were not nearly so interesting or important as those which had been raised by Colonel Hammond and Mr. Elsworthy.

First, under the Rent Restriction Acts and partly under the Housing and Public Health Acts there was a small matter in regard to valuing working-class houses let to or occupied by more than one family. He had recently been concerned with two adjoining and absolutely similar houses in London, each occupied by two families and each with one outside water-closet on the ground floor and none upstairs. The local authority served a notice requiring the provision of an additional water-closet in one house but not in the other, the reason being that one house was controlled and the other was decontrolled. The demand was made under a London County Council by-law. The problem was whether, in valuing those two premises, setting aside the question of the controlled or decontrolled rents, one should estimate the cost of providing the additional water-closet and the other things also mentioned in the same by-law at a date which was at the moment obscure; it was when the Rent Restriction Acts were finally repealed or six months afterwards. He would leave the solution of that problem to the members.

With regard to the question of allowance for annual repairs generally on that sort of property, he submitted that on an estate which included controlled and decontrolled tenancies it was very dangerous to work on anything like a percentage basis, because it worked out so differently on a controlled and a decontrolled tenancy, and one should not try to follow the Schedule A statutory deductions, because those were made on the actual rents. It was much better and safer to take a fixed sum per house which in one's experience it was necessary to spend on the upkeep of those houses.

With regard to the Shops Act, 1934, Section 10 required the occupiers or owners of shops to provide suitable and sufficient means of ventilation, heating, sanitary conveniences and washing facilities, and also facilities for meals. In making a valuation of shop property, particularly perhaps from the point of view of investment, one should be very careful to discover first of all

whether there were suitable and sufficient means of the kind to which he had referred, and, if not, whether a certificate had been obtained and was in force exempting the occupier from complying with the provisions as to sanitary conveniences and washing facilities. Such a certificate could be given if the local authorities thought it was not possible to provide the facilities owing to the congestion of the premises or if there was alternative accommodation reasonably procurable in the vicinity, but the certificate could be withdrawn at any time. The further difficulty might be met, that if the occupier was forced to carry out that sort of work he might apply to the County Court for an apportionment of the cost, if, as quite frequently happened, the shop premises were let on a quarterly tenancy or a tenancy whereunder the landlord was responsible for external repairs and the tenant for internal repairs. He submitted that one should be careful, in making a valuation of such properties, to decide whether such work was likely to be required and, if so, how the cost was going to be apportioned.

Mr. Elsworth had referred to the Landlord and Tenant Act, 1927, but had not mentioned the question of improvements made by tenants. If one was buying a property which was let to a tenant and looked as if it had had something done to it within the last few years, one should make sure whether the tenant had served a notice under the first section of the Landlord and Tenant Act, 1927, and put himself into the position of being able to claim compensation at the end of the term. If the tenant had done so, one had to go through some mental acrobatics in order to decide how much compensation he might be entitled to claim at the end of the term and then try to decide when the end of the term was likely to come.

In connection with the Public Health Act (London), 1936, there was a point with regard to sewers and drains, *i.e.*, when was a drain a drain and when was it a sewer? That was, he thought, very important, because in valuing a block of houses which apparently had a common drain one had to discover whether it was a private sewer or a public sewer.

Mr. ARTHUR H. DAVIS (Chartered Surveyor), said there were a few points arising out of Colonel Hammond's extremely able and interesting address which he would like to discuss.

The first was under the London Building Act, 1930, Section 44. That section dealt with the open spaces at the rear of domestic buildings and set out the requirements of the air space as being not less than 150 square feet with, in any event, a minimum depth of 10 feet exclusively belonging to such buildings and within its

curtilage. He would like the members to visualise the case of a building owner of a property the rear wall of which was the extreme limit of his boundary, and that wall an entirely blank wall in which he inserted, say, four windows in order to make habitable certain rooms in his building. In forming those windows he deliberately overlooked property of an adjoining owner, and thus endeavoured to obtain a dominant easement of light and air over his neighbour's property. Such incidents frequently occurred without any notification by the building owner of his intention, and it was only by chance or by the alertness of the adjoining owner that the fact came to his knowledge. It was interesting to note that, if the building owner's property were situated in a thoroughfare formed before the 31st December, 1894, and he did not by his building operations increase the perimeter of his building in any way, either horizontally or vertically, the London County Council had no control over the amount of light and air space at the rear of his building. The building owner therefore need not apply to the London County Council under the Town and Country Planning Act, 1932, and the district surveyor could not refuse to approve his plans if they were in accordance with the requirements of the London Building Act. In valuing a property of such description, therefore, it was essential to ascertain whether the building owner had actually obtained a dominant easement of light and air by prescription or had obtained a wayleave agreement from the adjoining owner to permit the windows to remain. If he had not done the latter, then in the event of there being no acquired easement, of course the adjoining owner still had the right to block out the building owner's new lights. Alternatively, in valuing the adjoining owner's property, somewhat similar considerations must be borne in mind, because, if the building owner had obtained prescriptive rights of light and air for his windows, then *ipso facto* the value of the adjoining owner's property would suffer in consequence by reason of loss of privacy and/or detriment to the probable future development of the same.

With regard to the Town and Country Planning Act, 1932, many owners of property in central positions which were suitable for rebuilding, with more economic and up-to-date buildings, had found themselves faced with serious difficulty by the limitation of development of their sites as regards both coverage and the height of any new buildings which it was desired to erect thereon. He was of opinion that many of the decisions of the local authorities in such matters were very arbitrary, indeed harsh, and had the effect of very considerably reducing the value of such property. He was also of opinion that owners either did not appreciate that they could appeal to the Ministry of Health in such circumstances or were afraid to risk the necessary expenditure required to make

the appeal, and thus, one might say, almost voluntarily lost a good proportion of the capital value of their property without effort to save it.

The Public Health (London) Act, 1936, Section 132, restricted the use of certain underground rooms as living accommodation when these did not conform to the requirements of the Act. In many instances where the local authority served notices it was impossible for the owner to comply with their requirements owing to inherent inability to do so, or, alternatively, the works of amendment and repair being of such an extensive character as to make it quite uneconomical to carry them out. That meant not only loss of rent but consequential loss of capital value of the property, and all that was apart from having underground rooms in a dwelling-house entirely unoccupied and possibly uncared for, with capabilities of nuisance arising therefrom.

Again, under the Public Health (London) Act, 1936, Section 282 (5) and paragraph 4 of the Fifth Schedule of the Act, and under the Public Health Act, 1936, Section 93 (a), the local authority was given power, where nuisance arose from any defects of a structural character, to serve a notice upon the owner of the premises. As members were aware, there was no exact legal definition of what constituted "structure" or a defect of a "structural character," but the meaning of the words was fairly clear to them as surveyors. The effect of that power was to add another burden on the shoulders of property-owners when the lessee, although he might have entered into full repairing covenants and an undertaking to pay all rates, taxes, assessments, charges, duties and outgoings, made a definite refusal to carry out the work, which work, under the Public Health Act, 1936, meant not only work of a purely sanitary character but also works involving means of escape in case of fire. As a result the unfortunate owner would have to carry out the works himself and then take such legal action against his lessee as might be necessary in order to recoup himself for his outlay. That burden might, with certain types of property, be a definite factor which had to be taken into consideration when valuing the same.

With regard to the Law of Property Act, 1925, Section 84, a considerably enhanced value might arise owing to an owner being able to get old and out-of-date restrictive covenants abridged and amended when the Official Arbitrator considered it was fair to take that course. In that connection there were prospects of considerable increases in property values.

Referring to the question mentioned by Colonel Hammond of a controlled house having two values, either as an investment or for owner-occupation, he had had a great deal of experience in making valuations for building societies, and he was of opinion

that there was little difference in the value for mortgage purposes because the house was controlled, and if the owner-occupier went out, the house was still controlled. It had not got a special value as an owner-occupied house, because the owner-occupier would know that it was controlled and he would not be likely to give a greatly higher price for it than would be given for an adjoining house bought as an investment, and if he desired to resell he could only get his money back from the restricted market of persons requiring a controlled house for their own occupation.

When making valuations most surveyors, he thought, put in their valuation "the value to-day under existing conditions" or "under conditions at present ruling," and they probably also made a point of saying, with an eye to the future, that in view of the existing conditions, which were ever changing, it would be wise to have the property revalued in three or five years' time.

With regard to the Landlord and Tenant Act, 1927, Section 18 (1), Dilapidations, he could not agree with Mr. Elsworthy that this section made any difference to the value of a property, because if the dilapidations were not a damage to the reversion they did not make any difference to the valuation. If the property were not in structural or sanitary repair, there was nothing in that section to prevent a schedule of dilapidations being served. Further, it had recently been decided in the High Court that where a lease contained general and specific repairing covenants, the lessee was not at the termination of the lease exonerated therefrom if the building were not to be shortly demolished or alterations made therein which would nullify the repairs.

Nor did he think that the Leasehold Property (Repairs) Act, 1938, made any difference to a valuation, because this Act applied only during the currency of a lease where it had more than five years to run and the rateable value was less than £100. That Act was passed solely with the object of preventing unscrupulous lessors from harassing their lessees with unnecessary and improper schedules for the purposes of exploitation and did not stop the right of serving a schedule of genuine structural and sanitary works.

Mr. DOUGLAS DONALDSON (Professional Associate) said there were two simple points which occurred to him and which seemed to affect valuation considerably. He was thinking especially of what Colonel Hammond had said about the difficulty of anticipating what would happen in the future.

He had in mind the question of rating private houses. As he understood it, the proposal was to endeavour to see that all

property had an assessment in accordance with the definition of gross value. It occurred to him that if that took place, as was anticipated, many people who had taken mortgages and who had not thus correctly calculated their outgoings with a view to the future would be seriously affected and that prices generally would fall. He was thinking of people who had bought property in outlying suburbs, where assessments were, say, £16 net when they well might be £30 net.

The second problem was the question of rating tenement houses in London. He noticed that several boroughs were rating tenement houses on an entirely different basis to that on which they rated exactly similar properties, and valuers from outside districts might allow present outgoings, when in fact within a few months perhaps the rateable value would be doubled. He was thinking of the way in which the local authorities took a different scale; they based it on each of the rents, and after making certain small deductions a completely different valuation was obtained.

The only other point that he wished to mention was Mr. Davis's remark about the Leasehold Property (Repairs) Act not affecting valuation. He would suggest that it had already in outlying suburbs, where assessments were, say, £16 net when freehold ground rents had been lowered.

Mr. V. C. DONALDSON (Chartered Surveyor) said that, despite Colonel Hammond's assurance that he was not going to attempt to give the solution of some of the problems that he had brought forward, he had hoped that Colonel Hammond would do so. It would have been very interesting to many of the members present if he could have helped them with regard to the very many difficult problems of valuation which they came across. Nor had any of the previous speakers in the discussion endeavoured to give any solutions, and he therefore proposed to rush in where angels had feared to tread.

With regard to the 50-acre housing scheme mentioned by Colonel Hammond, of which he himself had some intimate knowledge, the possibility or probability of that scheme was known in the district for a very considerable period before any notices were served or any definite resolutions passed. That brought him to one of the solutions which he wished to put forward, namely, that surveyors should, somehow or other, gain some local knowledge with regard to the property which they had to value. Any reputable surveyor in the borough in which the 50-acre housing scheme was situated would have told Colonel Hammond of the probability of the scheme being undertaken. The same applied to slum clearance schemes. The first thing that happened was that

the sanitary inspectors started going round and taking measurements of heights of ceilings, depths of back-yards, and the tenants very often knew all about a slum clearance scheme some months before the general public, non-resident in the slum area, heard about it.

With regard to the valuation of potential slum clearance properties, the standard adopted by the local medical officer of health should be ascertained. Some medical officers of health had a very much higher standard than others. The medical officer of health of the borough in which he himself practised had, to his mind, a somewhat high standard for the housing of the working classes, bearing in mind all the difficulties which the property-owner had to overcome in connection with the Acts. The property-owner could not voluntarily improve the conditions of the working classes to any appreciable extent because he was tied up with Rent Acts which seemed as though they were going to remain in existence for very many years to come.

The solution, therefore, that he suggested was to obtain all the local knowledge possible by calling upon local practitioners, if one did not happen to have intimate local knowledge oneself, and all surveyors could not have the intimate knowledge of the different parts of London which the man on the spot had.

Colonel Hammond had touched very lightly upon the question of overcrowding, but personally he thought that, as stressed by Mr. Elsworthy, surveyors should have in mind whether a property was overcrowded. It was sometimes difficult to find that out if one visited the property when the children were at school, but if one went between the hours of half-past twelve and half-past one, it was usually possible to ascertain the number of people living in the house. Houses which were overcrowded generally produced a very much higher rent than they would do when the overcrowding was abolished; that was another point which should be borne in mind and allowance should be made for it when valuing.

Another matter which should be borne in mind, he thought, was the notices under Section 9 of the Housing Act with which some local authorities were now oppressing property-owners. The notices were almost like schedules of dilapidations, and often cost over £40 or £50 to overcome. They were worse than schedules of dilapidations, because they called upon the owner to carry out work which a freeholder would not be entitled to do, such as putting in damp-courses and overcoming inherent defects to which a lessee could rightly object.

Mr. F. A. WAGSTAFF (Professional Associate) said he thought the members should beware of feeling that legislation necessarily produced damage to property-owners.

In the case of town planning he thought there were very big compensating factors in other directions. Property-owners now knew in a great many cases the limits of inconvenience to which they could be subjected. For instance, if they had property of a certain kind they knew that nothing worse than a certain type of property would be built next door.

Taking the case of the block of flats to which Colonel Hammond had referred, which had been intended to be five storeys high and had been reduced to three storeys, it might be that the legislation under which that reduction was imposed would increase the value of the houses next door, where the occupier might very much prefer a block of flats to be built with only three storeys. It should also be remembered that the people who would have occupied the two top floors of that block of flats would presumably be housed elsewhere, and it might well be that some other piece of land in another district would be increased in value by reason of the fact that certain central areas could not be so highly developed as they might have been. Therefore he thought that, although individual property-owners might be rather badly treated, when one looked at the matter in a wider sphere one realised that property values were not necessarily depreciated by legislation of the kind in question. Town planning was carried out with a view to the improvement of property and conditions of life generally for the community, and he thought that if it was assessed as a whole it would very likely be found that property values would not decline but increase.

At the same time he agreed very heartily with Colonel Hammond that difficulties arose through the very wide discretionary powers which the local authorities now possessed. He had particularly in mind certain cases in the London County Council area, where properties were at present devoted partly to business user and partly to factory user. In particular in the City one found to-day a very great tendency for firms which were largely of the show-room and warehouse type to have a floor where they could have a number of sewing machines, for instance, which brought them, strictly speaking, into the category of factory premises. He found that buildings which would comply with the London County Council requirements and could be used partly for light industrial purposes were of very much higher value, even in central areas, than would have been thought of a little while ago, and that they were much more easy to deal with than buildings suitable for warehouse purposes only. Under town planning those buildings were frequently scheduled for general building purposes

only, and one had to make an application for light industrial purposes. At the moment he was concerned with some property just outside the City, where he wanted to be able to say that the site was suitable for light industrial purposes. He was quite certain, from the enquiries which he had made, that anyone who acquired the site would be given permission to use it for that purpose, but it was not scheduled for that and it could not therefore be referred to in that way. That probably reduced its value, but he thought that in the end the purchaser would be able to do what he wanted with it.

The question of ribbon development was very important in connection with town districts as well as country districts, and on such questions as means of access, space for turning round vehicles, and loading and unloading on the property, when there were high site values, it made a very great difference.

Mr. M. R. DUNNETT (Professional Associate) said the point had been raised that, in regard to slum clearance, one should go to the local surveyor and find out all about it beforehand, and that the tenants usually saw the surveyor going round measuring heights of ceilings, and so forth. But surely valuations should not be made on hearsay. A medical officer of health might decide that certain property should be condemned, but that medical officer of health might die to-morrow and his successor might have entirely different ideas on the subject.

With regard to modern legislation being harsh, he knew of a case in which a building contract was entered into just before a resolution to improve the town planning scheme for the district, and it did not come under town planning. The cube had been agreed. Later the planning was altered entirely. The building was started nearly three years after the town planning resolution came into force and it was done by a different contractor. But, just because the cube had not been altered and it had been agreed before the town planning resolution came into force, it was allowed. Therefore, while modern legislation might be harsh in the case of some people, other people were more fortunate; they were able to get round the Act and found it to their advantage.

Mr. J. E. J. TOOLE (Professional Associate) said it seemed to him that the impression might be obtained from the discussion that an imputation of sharp practice was being made against local authorities, and such an idea seemed to be gaining ground.

Colonel Hammond had mentioned, in reference to the slum clearance scheme to which he had referred, that he had been

advised by the local authority that no scheme was "under consideration." Those words should make a surveyor beware. They meant that the council was not considering a scheme; they did not mean that the council would not consider a scheme in the near future. A surveyor should go to the local authority and obtain the local knowledge; that did not mean the local knowledge of an auctioneer or surveyor, but the local knowledge of the Borough Medical Officer, the Town Clerk, and other appropriate officials. In nine cases out of ten, if one saw the plans of the proposals under the Housing Act, one saw what was in project.

When a local authority bought houses for the purpose of housing schemes, the owners had a right of appeal to the Official Arbitrator, and if an owner did not go to the Official Arbitrator it might be taken that he was satisfied with the price offered to him. He understood from what Colonel Hammond had said that in the case to which he had referred the owner only received the value of the house in the open market, but there was no question whatever that any owner-occupier whose house was purchased by a local authority under the Acquisition of Land Act or the Housing Act was entitled to claim compensation in respect of disturbance and cost of removal.

Mr. W. F. THORPE (Chartered Surveyor) said he agreed with Mr. Wagstaff that property values on the whole were not decreased by town planning, but he would like to mention two cases with which he was concerned at the moment.

One was an estate of 30 acres just outside London, which clients of his had purchased two years ago. He himself had not been concerned in the purchase. Before the estate was purchased the town planning map was inspected, which showed the land zoned 12 houses to the acre. The area was an important one, the land being expensive and there being a prospect of a tube station being built near by. His clients purchased on the basis of 12 houses to the acre, but they did not apply for an interim development order. When plans were submitted, they were told that the zoning had been changed to 8 houses to the acre. As the purchasers bought the land on the basis of 12 houses to the acre and it was reduced to 8, there would be a loss of nearly £10,000. The point was that the local authority was satisfied that there should be 12 houses to the acre, but the adjacent authorities had called a conference and asked for the zoning to be reduced to 8 to the acre. He was consulted in the matter and an appeal was allowed, which had been heard and his clients were now awaiting the findings of the Minister of Health. That was a definite instance of values being reduced.

A further instance was in connection with a shopping site on an estate of 25 acres just outside London. The town planning map showed a shopping area. The land was purchased and the plans prepared, and roads and sewers were put in. He had gone so far as to settle the entrance to the shop site with the Ministry of Transport, the county council, and local authority. The town planning map (final scheme) had been sent back by the Ministry to the local authority with the shopping area cut down to a quarter of the size. His clients were appealing.

That again was a case where the value of the shopping site was reduced through zoning, and he was of the opinion that the owners should be consulted before alterations such as those were made.

Mr. ARNOLD KEEN (Chartered Surveyor) said it should be realised that even when a town planning scheme was finally approved by the Minister it could still be altered. No town planning scheme could ever be complete. For instance, in the case of the Hampstead and Highgate Town Planning Scheme, which had been finally approved by the Minister, the county council had powers, which from time to time they exercised, of varying the scheme. If therefore a valuer had to make a valuation of property coming within the area of the Hampstead and Highgate Scheme, it was not safe to assume that because a certain state of affairs was set out in the scheme it might not be altered. Surveyors could not be too careful to be on their guard in that connection.

A further difficulty arose in connection with properties which came within an area zoned for private residences, but which at the time of the making of the scheme were used for industrial or other purposes. The scheme when completed would probably provide that so long as those buildings were used for their original purpose they could continue to be so used although contrary to the zoning, provided there was not a void period of more than six months, in which case the exceptional user would cease and the property would come within the zoning of the scheme. A surveyor making a valuation of such a property could not know how long the exceptional user would continue, as he would not know at what date the property was likely to be void, and even if it were void for a period of six months it was possible that the town planning authority might not exercise their statutory powers.

He mentioned that point to show how difficult it was to forecast the future and to ascertain the facts on which a valuation was to be made and in support of his contention that no town planning scheme could ever be regarded as final.

The speakers that evening had all dealt with the problems of valuation, but no one had suggested how those problems should

be solved. It was obvious that town planning was producing problems which must be considered by any valuer making a valuation now. The difficulty was that the facts were uncertain, they could not be ascertained accurately now, they were often outside the control of the property-owner, and the problem would only be solved at some future date and having regard to the facts and circumstances at that time.

He thought the point had now been reached when it might very often be necessary for a valuer in expressing an opinion of value to give alternative valuations, and to say that if the circumstances were those set out in his report, then the value of the property was a certain figure; but if the circumstances should be changed, as they might quite likely be (and he should set out the possible alternatives), then the value would be different and he should give his alternative figure.

If the valuation were to be used for mortgage purposes, obviously the lower figure would be adopted, but if for purchase it must then be for the client to decide how much more than the lower figure he would give having regard to the speculative elements in the case.

He warned members of the necessity of being very careful how they framed their valuation, and that they were valuing the property under present conditions, which should be carefully set out so that it was quite clear as to exactly what it was they were valuing.

There were a good many other points to which he would have liked to refer, but time would not permit. He would only refer to the question that in valuing basement properties it was essential to ascertain whether those basements came within the requirements of the Housing Act, 1936, and if not what would be the cost of making them comply. The question of light should also be carefully considered.

Surveyors had now to deal with the requirements of A.R.P., and land was being taken at short notice by the Air Ministry for the construction of aerodromes all over the country. Those aerodromes did not comply with the town planning schemes, nor were they anticipated when the schemes were made. Under present conditions it was quite possible that the Ministry might acquire hundreds of acres of land and erect an aerodrome, completely ruining the amenities of the locality, and all that might take place in a few months.

It was essential, therefore, to consider the possibilities of local A.R.P. requirements and their effect on the valuation of the property to be valued.

Mr. REGINALD DAVEY, M.Sc., F.L.A.S. (Chartered Surveyor), said he thought some answer should be given to the question which Colonel Hammond had asked in the course of his most excellent and instructive address. If he might venture an answer, it would be that the valuation of the house with which Colonel Hammond was concerned should be made in accordance with the circumstances that were in existence at the time he received notice to treat. He did not think the fact that the local authority bought the adjoining house entered into the question, because, whatever they intended to do with it, that had not been done at the time when he received notice to treat, and local authorities were very well known to change their minds.

He thought Colonel Hammond should be congratulated for placing his finger on the real difficulty which modern legislation imposed on valuers, namely, the unlicensed or unbridled decisions which the various authorities had power to make. Mr. Wagstaff had referred to that and had said that under town planning that power was limited. That was quite true; the Town Planning Act was the one modern Act which was planning as opposed to control. It was the one modern Act under which one could go, when the scheme was in force, to the local authority and see the map and find out what one could do on one's land and the worst that could happen on the neighbouring land. That did make valuation of the land more easy. During the interim period there was no plan to which one could refer, and there were the evils of unbridled control. The same applied to ribbon development. In the case of ribbon development particularly, the highway authority had complete discretionary power as to what should happen on the controlled land, and that might, and in some cases did, have the effect of removing any building value from the land, because compensation under ribbon development was very much limited. One could not claim compensation except for ripe building land, and, if there was accommodation land on which one's client advanced money for mortgage, if he had to sell the land at short notice he might be able to recoup only the agricultural value and not the building value.

The vote of thanks was accorded with acclamation.

Colonel HAMMOND, in reply, said he would touch on only three of the many points which had been raised during the discussion.

With regard to the block of flats to which he had referred, which had been reduced from five storeys to three storeys, it was quite true that if he were living next door he would much prefer the block of flats to have only three storeys, but his point was that it was very hard on a man, within three months of

sending in his preliminary plans and after buying the property on the tentative approval of those plans, to have his working drawings rejected. He was not criticising the Act at all.

With reference to obtaining local knowledge, a point to which Mr. Donaldson had referred, he would say quite frankly that he and others from his building society had very often been to Mr. Donaldson for that purpose. He quite agreed that surveyors should obtain local knowledge from the people practising in the particular locality.

As to the difference in value between controlled houses bought for owner-occupation and controlled houses bought for investment, he did not agree with Mr. Davis. He knew many cases in which higher prices were paid by people who bought the controlled houses for their own occupation than could possibly have been afforded by those who bought for investment. He felt the property was worth more to an owner-occupier, but there was one point to be remembered, *i.e.*, if the owner-occupier wanted to sell the house he had to find another owner-occupier to buy it, or he would lose money on it.

PAPER NO. 589.

THE DEVELOPMENT AND FUNCTIONS OF CADASTRAL OPERATIONS.

By Sir Ernest Dowson, K.B.E., and Mr. V. L. O. Sheppard,
C.B.E.

Curators of the Cadastral Survey and Land Records Office.

*Paper to be discussed at the Ordinary General Meeting of
the Chartered Surveyors' Institution on Monday, 6th
March, 1939.*

The present paper originated in a suggestion that has frequently been made to us that the objectives and characteristics of cadastral survey are still imperfectly understood even by professional land surveyors not only in Britain, but even in many parts of the British Empire. We think that this is undoubtedly so, and that it is largely due to the technical processes so termed being commonly regarded by such surveyors isolated from the associated documentary records which these processes are designed to complement and serve. The same mistake in the other direction appears to us to be no less commonly made by legislators and administrators who, for their part, tend to regard the documentary processes as independent, and even to consider cadastral survey as an unwelcome, if unfortunately indispensable, ally. It is for this reason that we have adopted the comprehensive term "cadastral operations" in the title of this paper, since the part cannot be properly understood in detachment from the whole; but, unfortunately, that whole is so complex and many-sided that we have found it impossible to condense its presentation even in an elementary skeleton form into the compass of a paper suited for a single afternoon's consideration. It is for this reason that we have slightly modified the title of

this paper since it was announced. We have thought it better in addressing our present audience to forego detailed discussion of the technical processes of cadastral survey, the general character of which will be readily understood by them and to concentrate primarily upon the functions of cadastral records as a whole and the indispensable part that cadastral survey is required to play in their construction and maintenance. But this immediate concentration upon the more general aspects of the question must not be interpreted to mean that the technical side of the work does not require a fresh and less stereotyped consideration from British land surveyors. For it is not, we think, too much to say that the latter have so far commonly tended to regard cadastral survey as topographical survey writ large, whereas there are important distinctions in kind between the two which deserve much more critical attention than they have hitherto received. We hope to suggest these distinctions in due course elsewhere; but we make no attempt to do so here.

ORIGIN AND DEVELOPMENT.

The conception of modern cadastral operations germinated on the Continent, and its critical development is to be sought initially in France and subsequently in Central Europe. The origin of the word "*cadastre*," which has in French the comprehensive connotation of cadastral record or cadastral operations as a whole, is disputed. According to some authorities it is derived from the Latin *capitastrum*, a register of the Roman *capitatio terrena* or land tax which, as its name implies, was assessed on individual landholders in respect of definite units of land. On the other hand, Clédat in the *Dictionnaire etymologique de la langue française* says "le mot cadastre serait composé d'un "préfixe d'origine grécque *kata*, qui signifie de haut en bas " (sans passer un échelon) et du grec-byzantin *stikhon* " désignant la ligne du compte d'imposition. *Katastikhon*, " qui signifie le registre d'impôt, aurait produit *cadastre*

“ par l'intermédiaire du latin populaire et du provençal.”

A present-day French authority gives the following definition: “ Le cadastre est l'ensemble des documents “ établies à la suite des opérations ayant pour but la “ détermination des propriétés foncières d'un territoire, la “ constatation de la nature de leurs produits et l'évaluation de leur revenue, en vue de la répartition de l'impôt “ foncier.” Fifty years ago this definition was undoubtedly correct, whatever the origin of the word may have been. To-day, however, it has a far wider interpretation, and is commonly and conveniently applied to any systematic operations conducted to determine and record in an authoritative way (i.) the parcellation of the land for human use throughout the territory concerned by technical processes of land survey, and (ii.) the possession or ownership of such land and other interests therein by duly prescribed investigatory processes whether for fiscal or proprietary purposes or for both combined. When the work comprises a fiscal objective, the proceedings include the assessment of the land for this purpose, while provision may in all cases also be made for the inclusion of other useful data. It will be appreciated that it is impossible to give a definition of a *cadastre* which is both terse and comprehensive, but its distinctive character is readily recognised and may be expressed as the marriage of (a) technical record of the parcellation of the land through any given territory, usually represented on plans of suitable scale, with (b) authoritative documentary record, whether of a fiscal, proprietary or other nature relating thereto, usually embodied in appropriate associated registers. Collections of isolated plans and title-deeds relating to scattered land parcels do not, however, constitute a *cadastre*, which should essentially embody a general and systematic territorial record of some area ; but such collections may, of course, be the loose bricks to be ultimately shaped and fitted into a cadastral structure.

Cadastral records have been compiled on the Continent from very early times. Thus Provence possessed a *cadastre* before it formed part of the Kingdom of France; while in

France we read of the revision of the *cadastre* in the ancient Province of Dauphiné in 1359 and again in 1461. In 1807 Napoleon instituted his well-known cadastral operations, the maps and other records of which are still used and referred to as "*L'ancien cadastre.*" Other early *cadastres* were: Denmark 1780, Belgium 1808, Bavaria 1808, Saxony 1811, Holland 1812, Wurtemberg 1818. The nearest approaches to a *cadastre* of England that have ever been made are Domesday Book and the old Ecclesiastical Parish maps and tithe records.

The various Continental records mentioned all originated for purposes of land taxation. Owing to the consequent practical need to relate such taxation reliably and systematically to the land, without omissions or overlaps, they were based from an early date on local plans of the field parcellation of the commune or village concerned. Throughout central and western Europe cadastral plans and cadastral registers evolved in intimate association in this way as obviously complementary activities serving a common objective. The character and degree of development naturally varied from country to country and was not free from defects anywhere; but it may be said that from the outset throughout the Continent of Europe the interdependence of cadastral survey and cadastral rolls or registers has been recognised and is now regarded as axiomatic, with the result that the administration of the two is everywhere intimately interlocked. England has lagged greatly behind the Continental countries in the matter of proprietary survey. Speaking of this in 1913, the previous Chief Land Registrar said "the general use of plans for country properties did not come in till the middle of last century" "when the tithe maps were made, and they formed for many years a ready mode of reference in places where alterations were not frequent. Since the eighties, when the large scale Ordnance maps were completed for England and Wales, these maps have been to some extent substituted in deeds for the old tithe plans, but as they vary in a good many particulars from these latter, the

“ translation of an old tithe description into a modern
“ Ordnance one is not unattended with risk.” And again:
“ During the last 13 years over 150,000 conveyances have
“ passed through the Land Registry, and it is our
“ experience that about one in every four descriptions
“ necessitates a visit to the ground to clear up some
“ question of doubt, and this is not on account of slight
“ imperfections in regard to delicate points which do not
“ really matter, but substantial doubt, for instance, as to
“ which of two properties is intended to be conveyed, or
“ as to whether some distinct portion of the land as it
“ actually exists is, or is not, intended to be included.
“ Properties are described by names long disused, by
“ occupiers long since departed: wrong dimensions are
“ inserted, wrong positions, wrong boundaries, no boun-
“ daries; half a house is conveyed as if it was the whole,
“ six houses as if they were five, north appears for south,
“ long for short, straight for crooked, a house on one side
“ of the street conveyed by mistake for one on the other.
“ While errors and misdescriptions in conveyances are as
“ serious and as common as they are, it is impossible to
“ say that our system conforms to more than a very
“ mediocre standard in respect of accuracy.” It is only
quite recently that the co-operation of the Ordnance Survey
has been sought in cadastral operations in England; and it
is, we venture to think, only in England that the frequently
quoted dictum of an old time witness before an early Royal
Commission, that a map is a good servant but a bad master,
would have passed for wisdom in this connection. A map
is far from being the only instrument in cadastral operations
that requires to be used intelligently.

These different effects have to some extent no doubt
been due to different economic conditions. England has
pre-eminently been a country of large landlords of agricul-
tural land, with whom the State could deal without detailed
knowledge of tenants' holdings. The agriculturally valu-
able regions throughout Central and Western Europe, on
the other hand, were much more extensively owned by

smaller holders, who had to be dealt with directly by any taxing authority. This necessitated more exact, intimate and detailed knowledge of the individual land parcels and of their holders. It was in response to this need that the growth of local land-parcellation plans and complementary land tax rolls occurred so widely throughout these regions. And, as is well known, any well-ordered and well-administered land tax records precisely and dependably linked with the units of land taxed tend progressively to develop and to crystallise the rights of the taxpayers to the use, occupancy and ultimately ownership of the land in respect of which they are taxed. So that there was a natural tendency for these local parcellation plans and land tax records to develop insensibly into informal proprietary records enjoying general confidence wherever they were reliably and systematically kept up to date. Statutory recognition, following appropriate opportunity for challenge and judicial investigation, finally converted such of these records into the *livres fonciers* of the Continent, which embrace the functions of land tax records and of registers of title to the ownership of land. So established, the uses of these land books and their associated parcellation plans extended in other directions, so that the fully developed modern cadastral register or land book records mortgages, easements, insurances, and other incidents of land tenure, as well as much valuable statistical information as a matter of routine. The path of evolution has not, of course, been as successful or as complete everywhere throughout Central and Western Europe; but the full development of the initially rudimentary fiscal *cadastre* into the modern comprehensive proprietary, fiscal and generally informative *cadastre* has been outlined as justly as brevity permits, while this development is steadily proceeding wherever it has lagged or been arrested.

The most important instance of such arrest has been in France, progenitor, as already noted, of the European fiscal *cadastre*. This arrested development was due to the failure to keep the *l'ancien cadastre* " of Napoleon up

to date. In the absence of the reliable foundation for a modern comprehensive land register which the old fiscal *cadastre* would have provided, if it had been kept systematically up to date, the French, for purpose of proprietary record, had to fall back upon a system of registration of deeds dissociated from any *cadastre*. They have long recognised the defects of that system, and, in 1901, established the famous "*commission extraparlamentaire du cadastre*" to investigate and report on the possibilities of establishing a reliable and comprehensive system of modern land registration (*livres fonciers*) in its place. This commission sat for five years and its findings constitute the most exhaustive investigation of the question on record. Their main conclusion was that a complete reconstruction of the *cadastre* was indispensable. This was deferred on account of the cost, but has been initiated since the War, and is now being carried out most admirably, although so far only on a fiscal basis.

Within the British Empire a largely independent approach to modern land registration was initiated over a century ago in Australia and in England separately. The Australian movement, associated with the name of Sir Robert Torrens, is the better known of the two because of its greater success. Torrens successively filled the offices of Commissioner of Customs and Registrar of Deeds in Southern Australia. He ascribed the origin of the reform associated with his name to this sequence of functions. In the former capacity he had become accustomed to the ease, cheapness and security with which rights in ships were held and transferred. In the latter he found, in remarkable contrast, complexity, expense and uncertainty in the holding and transfer of rights in land. Yet ships were moveable, destructible, concealable units, while land is the sole form of property which is immovable, indestructible, unconcealable. So he set himself broadly to assimilate the holding and transfer of rights in land to that of the holding and transfer of rights in ships. In an essay explaining his reforms, which was published in 1859, he

frankly emphasised that they had been anticipated on the Continent of Europe and instanced the Hanse Towns, Prussia and Holland. It is also understood that he was greatly assisted in his work by Dr. Hübbe, an Australian of German origin, fully acquainted with cadastral work in Germany.

In England the objective sought was the similar assimilation of the holding and transfer of rights in land to that of the holding and transfer of rights in ships and in stocks and shares. Thus the first Royal Commission to recommend the establishment of registration of title in England when reporting in 1857 said: "If there had always been
" a register of land, as there is in fact a register of ships,
" of stock in the funds and of railway shares, it would be
" difficult to point out any substantial distinction between
" property of that description and land, so far as regards
" the mode and form in which they might respectively be
" transferred and sold. The distinction between them has
" arisen not so much from the different nature of the things
" themselves as from the different regulations to which they
" have been subjected in their origin and in the develop-
" ment of their legal qualities."

Unfortunately the Royal Commission in considering this objective were gravely mistaken in assuming that there was no critical distinction to be taken into account in the nature of landed property on the one hand and of property in the form of ships and of stocks and shares on the other. In the light of the much fuller experience available now, we have no hesitation in saying that in just this very distinction is to be found the basic reason why the establishment of the obvious and essentially simple expedient of a register of title to land has evolved naturally and successfully, and is welcomed as a normal and necessary facility, throughout Central and Western Europe, while its progress has been so tardy and its welcome so hesitant in England, in spite of the efforts of a series of distinguished Lord Chancellors and Royal Commissions, Parliamentary Committees and other exponents from 1828 onwards.

ESSENTIAL FUNCTION OF CADASTRAL SURVEY.

No doubt experience had shown that the regulations governing the ownership and transfer of ships and of stocks and shares were simpler and more effective than the regulations governing the ownership and transfer of land. And no doubt the success of the former pointed the way to a useful reform of the later. But the distinction between landed and other forms of property unquestionably arose from the real and deep-seated difference in the nature of the things themselves, of which the difference in the regulations governing them was the outcome, not the origin. Certainly the legal treatment of land has been assimilated in many important and helpful respects to that of other forms of property in the meantime; but although enactments can narrow, they cannot exorcise, the stubborn differences that are bound to a considerable extent to distinguish immovable property from property in movable and incorporeal forms. And it results from these differences and from the unstable character of landed property, that the effective book-keeping of rights to land is a considerably more complex operation than the book-keeping of rights to ships, and to stocks and shares.

A ship is a stable physical entity, absolutely separate, and readily differentiated throughout its existence, from every other ship. Under English law registration of a ship has to be effected at an authorised port of registry and the division of property in it is limited to sixty-four shares. These shares may be jointly held, but no joint owner may dispose severally of any interest that he possesses in any share. It is consequently a simple matter to keep under the relevant port of registry a special record of all the rights held in any given ship and to enter lawful transfers of such rights as they occur. Again, the minimum denominations of stocks or shares in any given financial undertaking are limiting sub-divisions of this form of property corresponding to the sixty-four admissible shares in a ship. Moreover, each issue of stock or of shares is effected

from some appropriate head office which corresponds for purposes of registration to a ship's port of registry. Such stocks and shares of the same denomination and issue are essentially identical and interchangeable, and being expressed monetarily in terms of the nominal capital of the undertaking, they are hardly less flexible units of wealth than money itself and lend themselves almost as readily to grouping and separation by common methods of financial accounting. The practice of numbering shares to prevent overlapping and fraud may further facilitate exact record. So that the effective registration of the holdings of stocks and of shares is also intrinsically a simple operation.

Unlike shipping, landed property is composed of unstable units constantly changing in response to human requirements and changing circumstances. Unlike stocks and shares, landed property is composed of a multitude of dissimilar and ever-varying units, each of which needs individual identification and individual definition. For every landed property differs from every other landed property in nearly every attribute, while any landed property may at any time engulf or be merged in any adjacent landed property.

It is no doubt also true, as has been frequently represented, that the legal conditions and incidents of the tenure of land are more varied and complex than those governing the tenure of other forms of property ; but Sir Charles Fortescue Brickdale demonstrated conclusively, in a Report on the systems of registration of title in Germany and Austria-Hungary presented to Parliament in 1896 after investigation on the spot, that these variations and complexities were fully as great in these countries as in England, but had constituted no serious impediment to the successful operation of registration of title.

It is not in the documentary record of the conditions and incidents of land tenures that the main obstacle to the satisfactory establishment and maintenance of a system of registration of title has been commonly encountered, but in the contingent necessity to devise and apply reliable and

economical methods of individualising and of recording the locations of the multitudinous and infinitely diverse components of the ever-changing jig-saw puzzle of landed property throughout the territory concerned. It is this that makes the construction and maintenance of a register of title to land an undertaking of a radically different order of magnitude and complexity to the keeping of the simple books required for the registration of property rights to numbers of such readily definable units as ships and as stocks and shares.

It is the function of cadastral survey in its fullest sense to meet this need and to mirror exactly and intelligibly at all times the ever-shifting parcellation of the soil, so that every unit is clearly individualised, can be promptly and simply, but unmistakably, referred to, and can be readily, precisely and indisputably located on the ground at all times and, if need be, to the satisfaction of a court of law. This requisite mirror of the parcellation of the land is primarily provided on the Continent in the shape of a series of suitably scaled sectional plans covering the territory affected, throughout each of which the land parcels are serially numbered for reference. But the original field measurements from which these sectional plans are plotted are carefully preserved so as to be available if occasion should arise.

While the definition of the parcellation of the land is thus the primary and indispensable function of cadastral survey, it is far from being the only one. Among its secondary, but nevertheless important, duties may be mentioned the determination of the areas of such parcels and the depiction on the cadastral map or plan of their surface features and situations on a convenient scale.

TYPES OF DOCUMENTARY RECORD.

There are three main types of official land record which cadastral operations may be directed to establish or maintain. They are:—

- (i) Land-tax records ;
- (ii) Registers of deeds relating to land ;
- (iii) Registers of title to ownership and of other interests in land.

A consideration of the various forms used for the compilation and maintenance of land-tax records in conjunction with a cadastral survey is interesting and instructive as illustrating the simplest type of cadastral operation from which the more complex modern records have evolved, but space does not permit of this here. These forms are designed primarily (i.) to be indexes to the parcellation plans and to record the tax assessments on each parcel and the persons liable, and (ii.) to aggregate the total tax payments due from each taxpayer in respect of all the parcels he holds within the perimeter of the village lands or other area. The taxing authority is not concerned as a rule with the titular right of the persons taxed to occupy, use, or own any parcel of land, but merely to assess taxation systematically and collect it easily thereon. Hence simple land-tax registers expressly aim at recording the names of those in actual possession of the parcels of land subject to tax, without regard to legal ownership. In the event of default movables or crops can be attached or, failing these, the land itself.

By a register of deeds affecting land is meant an official record in which either a copy or an abstract of every deed creating, transferring or annulling rights to land may or must be entered according to the nature of the deed, or as the procedure is voluntary or obligatory. These entries are made in chronological order as presented and are commonly indexed under the names of the transacting parties. Such registration does not dispense with the necessity for investigations of title or regarding the validity of the deeds themselves by intending purchasers or other interested persons. Moreover, important effects may result from judgments, devolution by will, &c., not embodied in deeds and consequently never registered. An even graver dis-

ability in the conduct of registries of deeds arises from these records being usually indexed solely by the date of the deed and the names of the transacting parties. The effect of recording transactions simply by the names of the transacting parties has been illustrated very clearly by the eminent French economist Monsieur Paul Gide. Speaking with reference to its operation in France he said :

“ Vous voulez savoir la situation de tel domaine, vous demandez au Conservateur s'il est hypothéqué (aliéné ou grevé d'un droit réel). Il vous répond : ' Je ne connais pas les immeubles, je ne connais que les propriétaires.' Vous citez alors de nom du propriétaire actuel : Jean Bernard ; le Conservateur trouve une demi-douzaine de Jean Bernard qui sont tous grevés d'hypothèques. Il vous délivre un état portant toutes les hypothèques de ces homonymes. Par contre, si vous omettez ou si vous désignez mal les noms des propriétaires, le Conservateur ne fait pas de recherches au nom de ces personnes, et vous risquez d'ignorer les hypothèques (ou les aliénations et droits réels) qu'ils ont consentis. Ajoutez que dans les actes, et par conséquent dans les transcriptions, le signalement de l'immeuble est le plus souvent donné par les noms des propriétaires voisins ; quand les voisins ont changé, on ne sait plus le quel immeuble il s'agit.”

The multiplicity of similar names in some countries is much greater than it is in France ; in such countries these observations would have proportionately greater force. Further, in many countries the evil practice of attempting to describe properties by the names of one-time neighbouring proprietors is aggravated by constant loose, and even mistaken, orientation. And even when plans are used to define the land which is purported to be dealt with, they are frequently faulty, obscure, or out of date.

Simple registration of deeds as a system of record may accordingly be summarised as an accumulation of information purporting to effect the legal situation of the land without any machinery for assuring its validity, its completeness and the unambiguous indication of the land affected ; for purging it of obsolete effects ; or for analysing it and making it readily intelligible and assimilable by

inquirers. A registry of deeds was appositely characterised long ago as a mausoleum of parchment.

Nevertheless, registration of deeds, if obligatory, does ensure that the terms and date of every deed affecting land that is executed is officially recorded. If the procedure is voluntary, this safeguard is put within the reach of any transacting party. It should, however, also be observed that this facility may be abused, and registration of a fraudulent deed may be, and often has been, resorted to, so as to give a spurious appearance of genuineness to a fabricated document.

However, if systems of registration of deeds are skillfully administered in association with appropriate land survey, excellent results may be secured with the co-operation of an intelligent public. Thus admirable service is rendered by, and great public confidence felt in, the systems of registration of deeds in force in the Union of South Africa, in Belgium, and in the Scandinavian countries. In these countries the security obtained is so good, principally, because no mutation can be registered until the cadastral plan has been brought up to date and approved by the National Survey.

Sufficient has, however, probably been said to demonstrate that registration of deeds is essentially an unsatisfactory and imperfect procedure, which may be made to function effectively in spite of its weaknesses, but not on account of any intrinsic merits.

We will now turn to the third and most fully developed type of land record: registration of title of ownership and of other interests in land. The essential distinction between this and the preceding type of record was expressed briefly and clearly by a Select Committee of the House of Commons when reporting on the same issue sixty years ago. Registration of title they said "aims at presenting the "intending purchaser or mortgagee with the net result of "former dealing with the property" while registration of deeds "places the dealings before him and leaves him to "investigate them for himself." The latter designation

is, however, flattering to registration of deeds, as will have appeared.

The fundamental advantage in the machinery of record afforded by registration of title is that the parcellation of the land becomes the basis of record in place of legal instruments or transacting parties. Primary attention is transferred from movable, evanescent, mistakeable units—documents and human beings—to immovable, indestructible and precisely definable units—the parcels of land affected. The effects of every instrument modifying the legal situation of the land is analysed and entered against the parcel or parcels of land affected, so that the current situation is always ascertainable at a glance. The record can thus be initially constructed and thereafter indefinitely maintained with relation to the existing parcellation of the territory concerned at any and every moment.

The twin pillars upon which any successful registration of title must rest are:—

- (a) A suitable Land Book or Register of Title, with certain ancillary records;
- (b) A Cadastral Survey continuously maintained up to date.

The Land Book or Register (*Grand Livre, Grundbuch*), as it is variously called, furnishes a mirror of the legal state of each registered parcel at any time. It is to be found in many forms. A separate page should be, and commonly is, devoted to each physically or legally separate unit of land. This page is usually and advantageously divided into three main parts, devoted to:—

- (a) References to the parcel (*e.g.*, parcel number, area, map references, &c.);
- (b) Entries concerning ownership (*e.g.*, name of owner, method, date of acquisition, limitations on ownership, &c.);
- (c) Burdens (*e.g.*, mortgages, &c.).

Further sub-divisions are also often made.

The German *Grundbuch* shows more fully than any other the particulars and conditions attached to each transaction, these details being contained in a *dossier* within the register. In England, on the other hand, the register consists of loose-leaf cards, each of which records in brief the legal situation of a certain parcel of land.

In no case may an entry be made in the register creating, modifying, or annulling ownership or real rights over the land unless authorised by an authentic and valid document or an order of a Court. Certain other ancillary records are necessary or convenient but need not be considered here.

The preservation in an orderly manner of all the documents on which the entries in the register are based is essential. They are usually and preferably filed, by year for each registry area, under the following headings:—

- (i) Transfers ;
- (ii) Transmissions ;
- (iii) Hypothecary charges ;
- (iv) Servitudes ;
- (v) Judgments ;
- (vi) Powers of attorney and other miscellaneous documents.

Under the full operation of registration of title the mere entry on the land register of a person as the proprietor of a parcel of land enables him to deal with the property without further proof that he is “ in fact ” the proprietor. Upon a sale or hypothec being transacted, the registrar enters the name of the purchaser on the register as owner, or the name of the lender as chargee, as the case may be, and the interest passes by that entry. In short, the idea of a register of titles may be said to be that the registrar keeps a running account of the title and other interests on the register, and officially informs the intending dealer what the legal situation of the land is at any time, without requiring him to investigate earlier transactions.

The two principal objectives of registration of title to land are:—

- (i.) The establishment of secure titles to ownership and other interests in land, independent of all previous proceedings ;
- (ii.) The facilitation, and consequently the cheapening and expedition, of all land transactions.

But, as already observed, an efficient system of land registration should be used concurrently to serve other public purposes connected with the land (*e.g.*, statistics of land utilisation).

An effective register of title to land must also be designed to give satisfactory service unceasingly from the time of its inception onwards, adapting itself to changes in land tenure, in social habits and in working procedure, as these arise, without any further need for corporeal reconstruction. It should be as trustworthy, complete and fully up to date; be as well arranged and as easily consulted; function as smoothly and economically ; and be as free from superfluous or obsolete content at every moment of its life, however long, as at its birth. It is therefore every whit as necessary to keep all the constituent records punctually purged of all superseded data and obsolete documents as to ensure prompt inclusion of all information and documents having current effect. The positive value of the latter may be more obvious, but it is only by providing for the former that the growth of congestion and confusion can be avoided, and these are by far the two most serious enemies to be feared in the conduct of any land registry. Any growth of congestion and confusion rapidly obstructs orderly arrangement and smooth and economical working, with resultant delay and expense, and increasing risks of unreliability in the records, of opportunities for corruption and fraud, and of eventual breakdown. A maladministered registry of title may become a mausoleum of parchment as well as a registry of deeds.

So long as registers of the old-fashioned solidly bound type were the only ones available, no prompt and systematic purging of the records was practicable. The best that could be done, with the most painstaking and conscientious effort, was to cancel entries and documents as these were superseded, and cross-reference the changes as ingeniously as possible, but the cancellations remained to clog the records until such time as complete re-writing of current entries in a new register could no longer be postponed. The design and manufacture of suitable loose-leaf equipment has now provided a completely elastic medium for the purpose, and has thus removed the last serious obstacle to the establishment of an effective and economical land register. Not only does the use of records of the loose-leaf type permit the prompt replacement of discarded by current matter day by day, and the re-arrangement in orderly sequence of the latter, but it also greatly reduces the shelf volume required for the records, by the elimination of all obsolete papers immediately, and of the unused paging which has to be provided for the needs of future years in registers of a solidly bound type.

It may be objected that loose-leaf registers facilitate fraud, and it is evident that an elasticity which operates so favourably is also capable of abuse. But it is congestion and confusion which afford the best opportunity for fraud. The risk of fraud cannot be entirely eliminated from any human undertaking, but fraud has little opportunity in an effectively conducted register of title, since it has to be carried through too many interconnected records, and thus necessitates too widespread collusion to elude detection for long. Moreover, the public are ordinarily fully protected against the effects of fraud.

Subsequent transactions in registered land are greatly facilitated by the use of statutory forms for common transactions (*e.g.* sale, lease, exchange, hypothec, &c.). These forms are expressed in simple language and are restricted to the effect which is given them by the law of which they form part, so that varieties of interpretation of intention

cannot be raised. Being of standard size, they are easy to file.

A special fund usually called an Assurance Fund is sometimes created from fees commonly levied at a rate of one fifth of 1 per cent., payable upon first registration and upon subsequent transmissions *mortis causa*. This is provided to indemnify those who sustain injury through the operation of registration of title. If a person rightfully entitled to any interest in land has lost it owing to another person having obtained an indefeasible registered interest, pecuniary compensation can be paid to the former from the Assurance Fund by way of damages. The desirability of establishing such a fund is evident, but it is neither an invariable nor an essential feature of registration of title.

INTERLOCKING OF SURVEY AND DOCUMENTARY RECORD.

The critical interdependence of the technical and book-keeping sides of cadastral operations has been emphasised earlier. It was also observed that it was the essential function of cadastral survey to mirror and record the parcellation of the land and that this parcellation is itself used as the basis of the complementary documentary record. The reference numbering of the parcels constitutes the working link between these two sides of the united record, so that the practical importance can hardly be exaggerated of having a system of numbering which is simple and clear and yet sufficiently elastic to respond without deterioration to the continuous alterations in the configuration of the parcellation that occur throughout any economically progressive territory.

One of the most important developments which have facilitated the establishment of such a system on the Continent has been the sub-division of the country into territorial compartments of manageable size, for purposes of cadastral record. This sub-division progressively follows the succession of customary administrative boundaries of the country concerned, province, county, district, what-

ever they may be, until the smallest of these—the commune, village or parish—is reached. Further sub-division commonly embodies natural blocks or sections of the village lands, characterised by situation or agricultural quality and often distinguished by local names. This ultimate sub-division was probably effected for fiscal purposes originally; but, subject no doubt to further adaptation, has also by a happy chance provided exactly the series of continuous territorial pigeon-holes needed to enable a simple and effective system of reference numbering of cadastral parcels to be established.

These blocks or sections constitute the stable territorial framework containing the mobile cadastral parcellation. They tend to vary in size inversely with the fiscal and economic value of the land. This is in natural response to the desirability of keeping plans of all blocks within the compass of an unbroken sheet, while depicting the more valuable and more closely parcellated land on a larger scale.

The sub-division of any extensive and closely settled territory in this way is an essential condition of the effective and economical perpetuation of any cadastral record thereon, for it alone enables the system of parcel numbering throughout the largest extent of territory to be permanently decentralised and localised. If the parcellation of a country was static, the reference numbering could be carried serially once for all throughout the whole extent of each commune, village or parish in an orderly and convenient way; but since this reference numbering must reflect the unceasing alterations in the parcellation that are inevitable, it would rapidly become complicated and confused thereby. The necessity to minimise all risks of confusion and mistake in entering and deciphering these essential links between the parcellation of the land and the record of its legal and/or fiscal situation need not be emphasised: nor the importance of doing so with celerity as well as certainty having regard to the fact that proceedings affecting hundreds of parcels may require to be recorded every day.

Fortunately, all serious risk of complication and con-

fusion in the system of reference numbering can be eliminated by the simple expedient of sub-dividing any territory into blocks of manageable size that can be readily represented to appropriate scale on single sheets of convenient size in the manner already indicated. For the eye can rapidly traverse an area of this restricted compass and pick out any such reference numbers as may be sought, with both sureness and despatch, while the permanent boundaries of the block prevent any confusion or intermixture with the parcellation in any adjoining block. Experience has, however, shown that if these conditions are to be ensured, the number of parcels in a block should not exceed 200 and is preferably less.

When a cadastral record is initially constructed, the reference numbering of the parcels within a block may accordingly run serially from 1 to 200. In the event of a parcel becoming further sub-divided its original number is cancelled, while the newly created parcels are given the next serial numbers available. Thus if parcel 56 was sub-divided into three portions for any reason, that number would disappear and the newly created parcels would be numbered 201, 202 and 203. Similarly, if three contiguous parcels 20, 21 and 25 were amalgamated, these three numbers would disappear and the newly created parcel would be numbered 204. The superseded numbers are not re-employed, but continue to refer to the superseded parcels, which may be useful. This is by far the simplest and clearest system of parcel reference numbering devised, and it will operate for long periods without any revision. On no account should the expedient of adding suffixes in any form to the original parcel numbers be resorted to.

The degree of accuracy requisite and economically justifiable in cadastral survey and the scale on which cadastral maps and plans should be plotted depends upon the character, economic value and use of the land and the size and shape of the prevailing parcellation. Thus it is evident that a considerably higher degree of accuracy is properly called for in cadastral operations in Egypt than in Tunis.

In the former, upwards of 92 per cent. of the holdings are less than 5 acres in area, while the value of an acre of good agricultural land ranges from £100 to £400. In the latter the average size of the holdings has been returned as 180 acres and its average value as £2 per acre.

The scales of the parcellation plans of the early European *cadastres* cited at the outset ran as follows—1: 1,250 to 1: 800 for urban areas and 1: 5,000, 1: 4,000, 1: 2,500, 1: 2,000 for rural areas. *La Commission extraparlamentaire du cadastre* recommended the adoption of a scale of 1: 1,000 as the standard for rural areas in France. To-day the standard scales in the countries mentioned are 1: 500 to 1: 200 in urban areas and 1: 1,000 in rural areas; but in practice considerable adaptation to local conditions is observed. Thus in Switzerland scales of 1: 5,000 to 1: 10,000 are used for cadastral record in lands of poor value such as Alpine pastures, &c. In tracts of this nature cadastral and topographical requirements are naturally fused, and maps depicting them have come to be called topo-cadastral maps.

In considering this aspect of the work we feel that attention should be called to two recent authoritative statements which suggest that the character of the cadastral map work on the Continent has in some respects been misunderstood. Thus in the final report of the Departmental Committee on the Ordnance Survey it is said that no other country has attempted to publish a map of practically the whole of its territories on as large a scale as 1: 2,500, while in discussing this report recently the Director-General suggested that continuous maintenance of a map to date was an innovation. But, as already emphasised, such continuous maintenance (*mise à jour*) is a *sine qua non* of cadastral operations. Indeed, the principal reason why cadastral plans on the Continent have not so far ordinarily been printed, is just because they are subject to continuous revision and consequently if published in the ordinary sense they would be out of date before they appeared. But this does not mean that these plans are not accessible to the

public. They are regularly available for consultation by any one in conjunction with the complementary documentary records at the office of the local authority (*la mairie*), at the local land registry, or at some other convenient public office ; while copies of a simple character (*e.g.*, tracings or sun prints) can be obtained on payment. The practical difficulty has been to print economically and provide expeditiously the few copies of the continuously changing original that are all that are ever required. In the new French *cadastre*, which has already been referred to, both mutations and changes in physical features are promptly carried directly to thick zinc plates embodying the plan of the block concerned. These plates are thus maintained up to date at readily accessible local centres, while such prints as may be required are obtained from them on a flat-bed proving-press before further changes are introduced. The new French *cadastre* has not, of course, covered a great deal of territory yet, and the measures referred to are of recent date ; but they demonstrate a lively appreciation of the need not only to keep the local plans continually up to date on the topographical as well as the cadastral side, but also to enable the public to obtain prints of them promptly and easily.

We feel that we should also mention that in Egypt the maps of the original fiscal cadastral survey on a scale of 1 : 2,500 covering, with minor exceptions, the whole cultivated area of the country were completely printed, published and on sale to the public in a normal way by the end of 1906. A new edition based on an entirely new cadastral survey followed. Field work plotted on a standard scale of 1 : 1,000 was commenced in 1919 for purposes of registration of title and land tax combined and is being concurrently extended and kept up to date. Prints on this scale of any blocks of land can be obtained by interested parties on application to any District Survey Office. Reductions of these incorporated in the regular 1 : 2,500 map series also continue to be published. Publication of proprietary maps cannot, of course, be expected

to pay for itself in any country, but must be regarded as a fulfilment of an obligation to the public.

ORGANIC CONSTRUCTION OF CADASTRAL RECORDS.

Attention was directed earlier to the evolutionary development of modern comprehensive cadastral records in Central and Western Europe; but something should also be said concerning the organic construction of such records *de novo* when necessary. No detailed analysis and discussion is possible within the limits of this paper of the widely differing procedures that have been designed or adopted for this purpose in various parts of the world. Attention must be restricted to one or two critically important factors in such operations that have not so far received consideration, but upon which the quality, economy and speed of the effects obtained may decisively depend.

In the first place it must be recognised that although the underlying principles which govern the successful establishment and maintenance of a modern cadastral record rule and must be observed generally, yet their detailed application has to be carefully and understandingly adapted to the land tenure, customs and agricultural economy; to the social and religious structure; and to the particular requirements and local conditions of the people and the country concerned. While nothing is more desirable than the intelligent application of the experience of one country to the requirements and conditions of another in cadastral operations, nothing has engendered more wasted effort, disappointment and failure than the assumption that legislation and the field and office processes that have worked successfully in one country can be transplanted ready made to any other. It is an academic illusion to aim, as some European authorities still appear to do, at a stereotyped legislation, technical methods and documentary procedure which can be mechanically extended to every country and to every stage of human and economic developments.

The establishment of a proprietary cadastral record throughout any territory necessitates the concurrent determination—

- (i.) of the parcellation of the land by cadastral survey, and
- (ii.) of the legal situation of each constituent parcel by investigatory processes prescribed by law, briefly described as settlement of title.

If the record is required for land tax purposes, provision must also or alternatively be made for the requisite valuation of the land.

The principal criterion commonly applied to proceedings of this nature is whether first registration is to be compulsory or optional; but the crucial decision in reality is whether such registration is to be effected in a systematic or a sporadic way. Systematic first registration requires that the complementary operations of cadastral survey and settlement of title shall be conducted methodically, parcel by parcel, village by village, through the territory concerned. Sporadic first registration means that these operations are carried out in a haphazard way following some fortuitous occurrence. Systematic first registration must be compulsory: but first registration that is obligatory under prescribed circumstances, such as the sale of the land, may be as haphazard in its territorial incidence as if it was purely optional.

Anyone with practical experience of proceedings of this nature will appreciate that, other conditions being the same, systematic first registration is bound to be much the more economical, the quicker, and (it may be added) the more satisfactory in its effects. In systematically conducted proceedings each locality is visited by the survey and settlement officers in pursuance of a regular programme, all the requisite investigations into title or other interest in all contiguous land parcels, and as to the limits to which they relate, are prosecuted in conjunction. The information can

be duly completed for the locality in respect both of survey and of title, and the work moves on. No doubt some issues must be left *sub judice* temporarily, but these fall readily into place when decided, if the survey and documentary records are effectively co-ordinated.

It is often assumed that the execution of cadastral survey can precede settlement of title—the situation, limits, shape and size of the land parcellation being picked out and crystallised in advance. But this assumption fails to recognise that cadastral survey is the complement of cadastral record, and has no meaning apart from the latter. Its function is to mirror the parcellation recognised by law as comprising the proprietary or fiscal sub-divisions of the land surface, a function which cannot be performed until that parcellation has been defined and thus recognised at least provisionally. It must also be remembered that the cadastral parcellation of a country is far from following physical features invariably, or from being adequately determined by such features alone when it does so. Doubtless a pre-existing topographical map of appropriate quality and scale may constitute an extremely valuable matrix for subsequent cadastral operations, but the distinction that has been made is nevertheless a real one. For the position of every legally or fiscally recognised land unit must be authoritatively located on the ground and on the map before it is brought on to the cadastral record, while revision of the survey must be effected if any error is found, if any material changes have occurred, or any modifications result from the requisite investigations into title or other interests. The complexity and extent of these amending operations tend to increase progressively with every additional year between original topographical survey and ultimate cadastral record. For experience elsewhere shows that mutations in the cadastral parcellation of the land in any economically active country may readily amount to 10 per cent. of the whole per annum. In short, the co-ordination of the operations of cadastral survey and documentary record is inescapable and is most economically

effected if the two operations are conducted in the closest association.

It may, however, be urged that indisputable and immense as the gain in efficiency, economy and celerity secured by systematic and conjoint operations for purposes of first registration may be, the adoption of this course is attended by the grave disability that it prevents the operations as a whole being made financially self-supporting as they should be. For while it is justifiable to charge a fee for first registration, when this is effected at the option of the interested party or upon a transfer of the land, it would neither be equitable nor practicable to charge universally for registration if this was imposed at a time and upon an occasion determined by the general interest, but without any regard for the circumstances of any particular parcel or individual affected. This consideration is true ; but the corollary surely is that systematic first registration should be gratuitous not that it should not be adopted.

The abandonment of a fee for a systematically effected first registration appears to us also to be sound in policy as well as in principle. It is surely politic, as well as proper, to waive fees for systematic first registration, because a readier and fuller co-operation can then be expected and required from all landholders. Such co-operation is a factor of supreme importance for the effective, rapid and economical conduct of the work. Nor need any ultimate loss of revenue be apprehended if the fees for subsequent current registration are cautiously scaled at the outset. For the initial cost of systematic and comprehensive cadastral operations should be very much lower per registered parcel or per acre than that of sporadic operations under the same conditions, while the rapid and wholesale extension of the registered area would be promptly reflected in the subsequent receipts for current dealings, &c. Moreover, if need be, there is no hardship in expressly maintaining a slightly higher scale of current fees on this account if this is spread over an adequate

introductory period (*e.g.*, twenty years) until the cost of the initial operations has been recovered.

Another point of supreme importance in any settlement and registration of title is the character of that title, more particularly whether it should be a possessory or an absolute title. A great deal of advocacy was devoted at one time to the former as offering a means of overcoming the unexpected difficulties that had been encountered in the establishment of registered title in England.

Discussing this subject in his report on H.M. Land Registry for the year 1926-27, the Chief Land Registrar said:—

“ One of the most significant consequences of the Land Registration Act, 1925, has been the final disappearance of possessory titles, except in rare and quite exceptional cases. Possessory titles were originally designed as an administrative expedient for getting land on the register in the first instance. They differ from absolute titles in that the title prior to first registration is not officially examined nor is it guaranteed. Persons dealing with them have to examine the title down to the date of first registration in the old-fashioned way. While they enable land to be placed on the register with the minimum of official work and cost, they confer on the public the minimum of the benefits of land registration. More than any other feature of the repealed Land Transfer Acts they have blinded the public to the advantages conferred by registration of title.”

In most parts of the British Empire possessory title is commonly used to connote a presumptive title that may be upset by due process of law, but cannot be challenged otherwise, while an absolute title is one that is judicially recognised and cannot in principle be upset unless obtained by fraud. The distinction was a British expedient and is not recognised on the Continent; but the existence of a possessory stage in the evolutionary development of cadastral titles there has been indicated earlier.

It is evident *a priori* (i.) that a settlement of possessory title can be effected considerably more expeditiously throughout any territory, for the same effort and expenditure, than a settlement of absolute title, and (ii.) also that

an expeditiously completed settlement of possessory title may be of considerably greater value to a country than a lethargic, incomplete and imperfectly maintained settlement of absolute title. This is more particularly so if appropriate measures are concurrently taken to ensure the progressive maturation of possessory title into absolute title. Such measures are well understood and readily implemented.

Over 1,900,000 possessory titles were settled in Egypt during the eight years 1898-06, not of choice, but because a determination of absolute title was at that time precluded by international difficulties. This comprehensive settlement of possessory title in Egypt enabled (i.) an equitable reassessment of land tax to be effected on all individual holdings, and (ii.) the State domain (crown land) to be determined throughout the whole country promptly. The determination of State domain, as of other titles, was open to challenge in the courts in any particular case: but since both the survey and the settlement operations were of a systematic and efficient character, such challenges were rare. So that as a rule the Government's title to the State domain thus provisionally established in the course of cadastral survey and field settlement rapidly became impregnable.

But although the substitution of a possessory for an absolute title as the object of initial settlement offers a means of cheapening and accelerating this process, which may demand serious consideration under certain circumstances, this is not a policy to be usually recommended. For a settlement of possessory title is essentially not a settlement of title at all, but merely a stage towards such a settlement which requires to be brought to maturity by complementary measures if its value is not to evaporate and the whole work require to be redone *ab initio*, as has been recurrently necessary both in India and in Egypt. This maturing process necessitates further efflux of time, an unknown volume of sporadic litigation and survey, and an appreciable dilution and postponement of the benefits of a

genuine settlement of title. These effects tend to impose greater burdens in the aggregate on the taxpayer and/or the land in arriving at the requisite finality than the pursuit of that finality by the systematic determination and maintenance of absolute title from the outset should occasion, if pursued with due regard to a common economy of administrative, technical and judicial proceedings.

In winding up we wish particularly to ask the indulgence of our audience on account of the extreme difficulty that we have experienced in endeavouring firstly to condense so comprehensive and unaccommodating a subject into even a lengthy paper, and secondly to do so intelligibly without the aid of plans and diagrams. If we can remedy the latter to some extent when the paper is presented we will do so.

We have not had the space, nor has it been our object, to present the advantages to any country that the existence of modern comprehensive cadastral records provides primarily, but by no means exclusively, in the form of a registration of title to land. These advantages are not, we think, seriously questioned to-day, and they have other and abler advocates.

But of many requirements that we have ventured to urge, there are two which we would expressly ask all those concerned or interested in the establishment of such a record to ponder and to elucidate to the wider public they reach. The first of these is the supreme importance of conducting any cadastral operations in a comprehensive and systematic way if extended dissipation of time, energy and funds is to be avoided in doing so, and the second is the need to secure wider recognition everywhere that cadastral operations to be of serious value must ceaselessly and punctually reflect the actual conditions of the day through any territory they serve.

APPENDIX.

Appendix showing territories which have established systems of registration of title to land or of registration of deeds or are in course of doing so.

I.—Territories which have developed Systems of Registration of Title from Fiscal Cadastres.

Alsace-Lorraine	...	...	...	...	...	1891
Austria	...	...	...	...	...	1871
Germany:—						
Baden	...	...	...	...	...	1809
Hesse	...	...	...	...	...	1843
Saxony	...	...	...	...	...	1845
Sonderhausen	...	...	...	...	...	1850
Altenburg	...	...	...	...	...	1852
Reuss (younger)	...	...	...	...	...	1858
Meiningen	...	...	...	...	...	1862
Prussia	...	...	...	...	...	1872
Reuss (older)	...	...	...	...	...	1873
Oldenburg	...	...	...	...	...	1876
Coburg-Gotha	...	...	...	...	...	1877
Anhalt	...	...	...	...	...	1877
Brunswick	...	...	...	...	...	1878
Lubeck (amended)	...	...	...	...	...	1879
Waldeck	...	...	...	...	...	1881
Lippe-Detmold	...	...	...	...	...	1881
Schaumburg-Lippe	...	...	...	...	...	1884
Hungary	...	...	...	...	...	1855
Switzerland	...	...	...	...	...	1913
Egypt	...	...	...	...	...	1920
Yugoslavia (amended law)	...	...	...	...	...	1930
Poland (amended)	...	...	...	...	...	1919
Czechoslovakia	...	...	...	...	...	

II.—Territories in which Registration of Title has been instituted without previous Cadastres.

England (1875 amended)	...	...	...	...	1925
Ireland	...	...	...	...	1891
*Federated Malay States	...	...	...	...	1911

*Brunei	1909
*Sarawak	1931
Palestine	1921
*Nigeria	1935
*Kenya	1919
*Uganda	1908
*Tanganyika	1923
Canada:—	
*Dominion of Canada	1870
Ontario	1885
*Manitoba	1885
*British Columbia	1870
*Saskatchewan	1906
*Alberta	1870
*Jamaica	1889
*British Honduras	1861
The Anglo-Egyptian Sudan	1899
Iraq	1923
Australia:—	
*New South Wales	1862
*Victoria	1861
*South Australia	1857
*Queensland	1861
*Western Australia	1874
*New Zealand	1870
*Fiji	1876
*Tasmania	1861
United States of America:—	
*New York	1908
*California	1897
*Colorado	1903
*Georgia	1917
*Illinois	1895
*Massachusetts	1898
*Minnesota	1901
*Nebraska	1915
*North Carolina	1913
*North Dakota	1917
*Ohio	1896
Declared unconstitutional.	Re-enacted 1911
*Oregon	1901
*South Dakota	1917
*Virginia	1916
*Washington	1907
*Hawaii	1903
Philippine Islands	1902

Siam	...	...	...	...	...	...	...	1927
Tunis	...	...	...	...	...	...	...	1885
Syria	...	...	...	...	...	...	...	1930
Morocco	...	...	...	...	...	...	...	1913

N.B.—The progress made in these territories differs widely. In some registration of title has been in general and effective operation for a long time. In others the results so far obtained have been meagre or unsatisfactory. The systems in the countries marked with an asterisk were derived directly from the Torrens legislation. In these countries the Land Book is public. In Germany and in England it is strictly private. In detail all these systems are different.

III.—Countries having Systems of Registration of Deeds.

The following countries, although possessing a system of registration of deeds and a fiscal cadastral survey, have not yet introduced registration of title:—

France	Norway	Belgium
Italy	Sweden	Spain
The Netherlands	Denmark	Portugal